

What is claimed is:

1. A hollow, cylindrical toner bottle for discharging toner stored therein when mounted to an electrophotographic image forming apparatus in a substantially horizontal position and then rotated about an axis of said toner bottle, said toner bottle comprising:

a mouth comprising a toner outlet and a cylindrical wall; and

a body comprising a circumferential wall and a bottom;

wherein said mouth is formed by injection molding, and an outer circumference of said toner outlet has circularity of 0.7 mm or below.

2. The toner bottle as claimed in claim 1, further comprising a flat flange extending radially outward from an outer periphery of said cylindrical wall of said mouth substantially perpendicularly to an axis of said cylindrical wall.

3. The toner bottle as claimed in claim 2, further comprising a positioning portion for positioning said toner bottle relative to the electrophotographic image forming apparatus, wherein said toner outlet and said positioning portion have coaxiality of 1.0 mm or below.

4. The toner bottle as claimed in claim 3, wherein said positioning portion is positioned on said

circumferential wall of said body.

5. The toner bottle as claimed in claim 3, wherein said positioning portion comprises a peripheral portion of said flange.

6. The toner bottle as claimed in claim 5, wherein said positioning portion comprises at least three lugs extending out from a circumference of said flange.

7. The toner bottle as claimed in claim 2, wherein said flange is separable from said cylindrical all of said mouth.

8. The toner bottle as claimed in claim 2, wherein a suitable portion of said toner bottle below said flange is clouded.

9. The toner bottle as claimed in claim 2, wherein ribs are formed on said flange for transferring a torque to said toner bottle.

10. The toner bottle as claimed in claim 2, wherein said flange is formed with recesses or projections for identification or for engaging with a bottle holder, which is disposed in the electrophotographic image forming apparatus for holding said mouth, to thereby cause said toner bottle to rotate integrally with said bottle holder.

11. The toner bottle as claimed in claim 1, wherein said body comprises a bulging portion adjoining said mouth and bulging toward an axis of said toner bottle little by

little.

12. The toner bottle as claimed in claim 11, wherein said bulging portion is clouded.

13. The toner bottle as claimed in claim 1, wherein said circumferential wall of said body is formed with a spiral rib protruding toward an axis of said toner bottle.

14. The toner bottle as claimed in claim 1, wherein said circumferential wall of said body has a wall thickness of about 1.0 mm or below.

15. The toner bottle as claimed in claim 1, wherein a reinforcing structure for reinforcing said toner bottle is provided on part of said circumferential wall of said body.

16. The toner bottle as claimed in claim 15, wherein said reinforcing structure comprises a plurality of spiral ribs.

17. The toner bottle as claimed in claim 15, wherein said reinforcing structure comprises a projection formed in part of a recess, which is formed on said circumferential wall of said body and reciprocal to said spiral groove.

18. The toner bottle as claimed in claim 15, wherein said reinforcing structure comprises at least one straight rib protruding inward from said circumferential wall of said body and extending in an axial direction of said toner bottle across said spiral rib.

19. The toner bottle as claimed in claim 1, wherein said toner bottle is formed of a mixture of polyethylene terephthalate and polyethylene.

20. The toner bottle as claimed in claim 1, wherein said toner bottle is formed of a material reclaimed from used products collected on a market or wastes available from a factory.

21. The toner bottle as claimed in claim 20, wherein said toner bottle is formed of the material reclaimed and virgin resin of a same kind as said material.

22. The toner bottle as claimed in claim 20, wherein said toner bottle is formed of the material reclaimed and a plasticizer.

23. The toner bottle as claimed in claim 1, wherein ribs are formed on said bottom of said body for transferring a torque to said toner bottle.

24. The toner bottle as claimed in claim 1, wherein said toner bottle comprises at least two separable parts.

25. The toner bottle as claimed in claim 1, wherein said toner bottle is formed by biaxial, stretch blow molding.

26. The toner bottle as claimed in claim 1, wherein said toner bottle is packed with the toner beforehand.

27. The toner bottle as claimed in claim 26, further comprising a cap fitted on said mouth.

28. The toner bottle as claimed in claim 27, wherein said cap comprises an air vent and a filter closing said air vent.

29. In an electrophotographic image forming apparatus operable with a hollow, cylindrical toner bottle for discharging toner stored therein when mounted to said electrophotographic image forming apparatus in a substantially horizontal position and then rotated about an axis of said toner bottle, said toner bottle comprising:

a mouth comprising a toner outlet and a cylindrical wall; and

a body comprising a circumferential wall and a bottom;

wherein said mouth is formed by injection molding, and an outer circumference of said toner outlet has circularity of 0.7 mm or below.

30. In a method of producing a toner bottle from a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion by biaxial, stretch blow molding, an outer circumference of said mouth portion has circularity of about 0.7 mm or below.

31. In a method of producing a toner bottle from a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion by biaxial, stretch blow molding, an outer circumference of said mouth portion

has circularity of about 0.7 mm or below, and said mouth portion and said support ring portion have coaxiality of about 1.0 mm or below.

32. In a method of producing a toner bottle from a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion by biaxial, stretch blow molding, use is a mold formed with a recess at which a gas vent communicated to an outside of said mold is open, and a gas is forcibly sucked out of said recess during molding to thereby form a projection on said toner bottle.

33. In a method of producing a toner bottle from a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion by biaxial, stretch blow molding, a lug protrudes from said support ring portion for allowing, before said stretch blow portion softened by heat is introduced in a mold, adjusting means to adjust an angular position of said preform in engagement with said lug.

34. In a method of producing a toner bottle from a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion by biaxial, stretch blow molding, when said stretch blow portion is to be stretched in a mold, a hollow stretch pin is inserted into said preform via said mouth portion for pressing a bottom of said preform while, at the same time, compressed air

is sent into said preform via a passage formed in said stretch pin and holes formed in a wall of said stretch pin.

35. In a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion for producing a toner bottle by biaxial, stretch blow molding, an outer circumference of said mouth portion has circularity of about 0.7 mm or below.

36. The preform as claimed in claim 35, wherein a surface of said preform is at least partly roughened.

37. The toner bottle as claimed in claim 35, wherein said toner bottle is formed of a mixture of polyethylene terephthalate and polyethylene.

38. The toner bottle as claimed in claim 35, wherein said toner bottle is formed of a material reclaimed from used products collected on a market or wastes available from a factory.

39. The toner bottle as claimed in claim 38, wherein said toner bottle is formed of the material reclaimed and virgin resin of a same kind as said material.

40. In a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion for producing a toner bottle by biaxial, stretch blow molding, an outer circumference of said mouth portion has circularity of about 0.7 mm or below while said mouth portion and said support ring portion have coaxiality of

about 1.0 mm or below.

41. The preform as claimed in claim 40, wherein a surface of said preform is at least partly roughened.

42. The toner bottle as claimed in claim 40, wherein said toner bottle is formed of a mixture of polyethylene terephthalate and polyethylene.

43. The toner bottle as claimed in claim 40, wherein said toner bottle is formed of a material reclaimed from used products collected on a market or wastes available from a factory.

44. The toner bottle as claimed in claim 43, wherein said toner bottle is formed of the material reclaimed and virgin resin of a same kind as said material.

45. In a preform basically made up of a mouth portion, a support ring portion and a stretch blow portion for producing a toner bottle by biaxial, stretch blow molding, said stretch blow portion is stretched by 1.5 to 3 times in a vertical and a horizontal direction.

46. The preform as claimed in claim 45, wherein a surface of said preform is at least partly roughened.

47. The toner bottle as claimed in claim 45, wherein said toner bottle is formed of a mixture of polyethylene terephthalate and polyethylene.

48. The toner bottle as claimed in claim 45, wherein said toner bottle is formed of a material reclaimed from



used products collected on a market or wastes available from a factory.

49. The toner bottle as claimed in claim 48, wherein said toner bottle is formed of the material reclaimed and virgin resin of a same kind as said material.

50. A mold for forming by biaxial, stretch blow molding a toner bottle including a projection for feeding toner to an electrophotographic apparatus, said mold comprising:

a recess for forming the projection; and

a gas vent open at a bottom of said recess for communicating said recess to an outside of said mold.